What is claimed is:

1. A method of detecting a microorganism in an aqueous solution or suspension, the aqueous solution or suspension not comprising precultured microorganisms, the method comprising

mixing the solution or suspension with microspheres coated with antibodies or antibody fragments comprising an antigen binding site selective for the microorganism, to create a microsphere-solution/suspension mixture; then

evaluating the microsphere-solution/suspension mixture for agglutination,

wherein the presence of agglutination indicates that the solution or suspension contains the microorganism.

2. The method of claim 1, wherein the solution or suspension is obtained from a food, an animal feed, or a water supply.

3. The method of claim 1, wherein the solution or suspension is obtained from a vertebrate.

4. The method of claim 1, wherein the solution or suspension is obtained from a mammal.

5. The method of claim 1, wherein the solution or suspension is obtained from a human..

6. The method of claim 1, wherein the solution or suspension is obtained from a specimen selected from the group consisting of urine, stool, sputum, bronchial aspirate, cerebrospinal fluid, pus or blood.

7. The method of claim 6, wherein the solution or suspension is whole blood or comprises a blood product.

8. The method of claim 7, wherein the solution or suspension is plasma or serum.

9. The method of claim 7, wherein the solution or suspension comprises a blood product that is substantially purified from other blood products, the blood product selected from the group consisting of red blood cells, platelets, factor IX, factor VIII, albumin, and antibodies.

10. The method of claim 9, wherein the blood product is red blood cells or platelets.

11. The method of claim 9, wherein the blood product is platelets.

12. The method of claim 1, wherein the microorganism is a bacterium.

13. The method of claim 12, wherein the bacterium is a Gram-positive bacterium.

14. The method of claim 12, wherein the bacterium is a Gram-negative bacterium.

15. The method of claim 12, wherein the bacterium is an acid fast positive bacterium.

16. The method of claim 12, wherein the bacterium is selected from the group consisting of a *Staphylococcus sp.*, a *Pseudomonas sp.*, a *Listeria sp.*, an *Enterobacteriaceae* species, a *Vibrionaceae* species, a *Clostridium sp.*, a *Campylobacter sp.*, a *Bacillus sp.*, *Escherichia coli*, a *Sarcina sp.*, a *Flavobacterium sp.*, a *Bacillus sp.*, an *Alcaligenes sp.*, a *Micrococcus sp.*, a *Serratia sp.*, a *Klebsiella spp.*, a *Streptococcus sp.*, a *Herellea sp.*, a *Corynebacterium sp.*, a *Mycoplasma sp.*, a *Pseudomonas sp.*, a *Citrobacter sp.*, a *Treponema sp.*, a *Salmonella sp.*, *Serretia marcescens*, *Yersinia enterocolitica*, a *Legionella sp.*, a *Bartonella sp.*, and a *Brucella sp.*.

17. The method of claim 12, wherein the bacterium is selected from the group consisting of *Staphylococcus epidermidis*, *Staphylococcus aureus*, *Salmonella choleraesuis*, *Serratia marcescens*, *Klebsiella pneumoniae*, a *Corynebacterium sp.*, *Bacillus cereus*, a *Streptococcus sp.* of the viridans group, *Pseudomonas fluorescens*, *Pseudomonas putida*, *Treponema pallidum*, *Yersinia enterocolitica*, *Citrobacter freundii*, *Escherichia coli*, *Enterobacter cloacae*, and an α-hemolytic *Streptococcus sp.*

18. The method of claim 12, wherein the bacterium is *Staphylococcus epidermidis*.

19. The method of claim 1, wherein the microorganism is a parasite.

20. The method of claim 19, wherein the parasitic species is selected from the group consisting of a *Trypanosoma sp.*, a *Plasmodium sp.*, a *Schistosoma sp.*, a *Babesia sp.*, a *Toxoplasma sp.*, a *Brugia sp.*, a *Wuchereria sp.*, a *Borrelia sp.*, and a *Leishmania sp.*.

21. The method of claim 19, wherein the parasitic species is selected from the group consisting of a *Plasmodium sp.*, a *Babesia sp.*, and *Trypanasoma cruzi*.

22. The method of claim 1, wherein the microorganism is a fungus.

23. The method of claim 22, wherein the fungus is selected from the group consisting of an *Aspergillus sp.*, a *Blastomyces sp.*, *Coccidioides immitis*, a *Candida sp.*, *Histoplasma capsulatum*, and a *Fusarium sp.*.

24. The method of claim 1, wherein the solution or suspension has been stored for at least five days when the method is executed.

25. The method of claim 1, wherein the solution or suspension has been stored for less than five days when the method is executed.

26. The method of claim 1, wherein the microspheres are latex microspheres.

27. The method of claim 1, wherein the microspheres are red blood cells.

28. The method of claim 1, wherein the microspheres are colored.

29. The method of claim 1, wherein the microspheres are fluorescent.

30. The method of claim 1, wherein the diameter of the microspheres are between 0.5 and 10 μm.

31. The method of claim 1, wherein the antibodies or antibody fragments are adsorbed noncovalently to the microspheres.

32. The method of claim 1, wherein the antibodies or antibody fragments are covalently bound to the microspheres.

33. The method of claim 1, wherein the antibodies or antibody fragments are indirectly bound to the microspheres.

34. The method of claim 1, wherein the antibodies or antibody fragments are fluorescent.

35. The method of claim 1, wherein the microsphere-solution/suspension mixture is about 250 μl or less.

36. The method of claim 1, wherein the microsphere-solution/suspension mixture is evaluated on a hanging drop slide.

37. The method of claim 1, wherein the microsphere-solution/suspension mixture is evaluated with a microscope.

38. The method of claim 37, wherein the microscope is a fluorescence microscope.

39. The method of claim 1, wherein the microsphere-solution/suspension mixture is evaluated with an instrument that measures light scattering.

40. The method of claim 39, wherein the instrument measures fluorescent light scattering.

41. The method of claim 1, wherein the microsphere-solution/suspension mixture is evaluated visually with the naked eye.

42. The method of claim 1, further comprising applying the microsphere-solution/suspension mixture to a gel surface then subjecting the gel with the microsphere-solution/suspension mixture to centrifugation before the evaluation step, wherein substantial retardation of movement of the microspheres after centrifugation when compared to the microspheres without the solution indicates the presence of agglutination.

43. The method of claim 42, wherein the microspheres are colored.

44. The method of claim 42, wherein the presence of agglutination is evaluated visually with the naked eye.

45. The method of claim 42, wherein the presence of agglutination is evaluated with an instrument.

46. The method of claim 1, wherein the antibodies or antibody fragments comprising an antigen binding site are polyclonal.

47. The method of claim 1, wherein the antibodies or antibody fragments comprising an antigen binding site are monoclonal.

48. The method of claim 1, wherein the antibodies or antibody fragments comprising an antigen binding site are recombinant.

49. The method of claim 1, wherein the antibodies or antibody fragments comprising an antigen binding site are Fab fragments.

50. The method of claim 1, wherein the antibodies or antibody fragments comprising an antigen binding site are $F(ab')_2$ fragments.

51. The method of claim 1, wherein the antibodies are produced by an immune response to a whole-cell preparation of the microorganism.

52. The method of claim 1, wherein the antibodies are produced by an immune response to a preparation of a portion of the microorganism.

53. The method of claim 52, wherein the portion of the microorganism comprises a polysaccharide.

54. The method of claim 52, wherein the portion of the microorganism comprises a protein.

55. The method of claim 52, wherein the portion of the microorganism comprises a lipid.

56. The method of claim 52, wherein the microorganism is a bacteria and the portion of the bacteria comprises a lipopolysaccharide.

57. The method of claim 1, wherein the antibodies are produced by an immune response to a common antigen.

58. The method of claim 57, wherein the common antigen is a peptide comprising an amino acid sequence determined to be a consensus sequence of multiple species or strains of microorganisms.

59. A method of detecting at least one of at least n microorganism species in an aqueous solution or suspension, the method comprising

mixing the solution or suspension with microspheres coated with n distinct antibodies or antibody fragments comprising an antigen binding site, wherein each of the n

distinct antibodies or antibody fragments comprising an antigen binding site is selective for the one of the n microorganism species, and wherein microspheres coated with antibodies or antibody fragments comprising an antigen binding site selective for each of the n microorganism species is present, to create a microsphere-solution/suspension mixture; then

evaluating the microsphere-solution/suspension mixture for agglutination, wherein the presence of agglutination indicates that the solution or suspension contains at least one of the n microorganism species.

60. The method of claim 59, wherein each microsphere is coated with antibodies to only one bacterial or parasitic species.

61. The method of claim 59, wherein at least one microsphere is coated with antibodies to more than one bacterial or parasitic species.

62. The method of claim 61, wherein substantially all of the microspheres are each coated with antibodies to more than one bacterial or parasitic species.

63. The method of claim 59, wherein the solution or suspension is whole blood or comprises a blood product.

64. The method of claim 63, wherein the solution or suspension is plasma or serum.

65. The method of claim 63, wherein the solution or suspension comprises a blood product that is substantially purified from other blood products, the blood product selected from the group consisting of red blood cells, platelets, factor IX, factor VIII, albumin, and antibodies.

66. The method of claim 65, wherein the blood product is red blood cells or platelets.

67. The method of claim 65, wherein the blood product is platelets.

68. The method of claim 59, wherein the solution or suspension has been stored for at least five days when the method is executed.

69. The method of claim 59, wherein the solution or suspension has been stored for less than five days when the method is executed.

70. The method of claim 59, wherein the microspheres are latex microspheres.

71. The method of claim 59, wherein the microspheres are colored.

72. The method of claim 59, wherein the microspheres are fluorescent.

73. The method of claim 59, wherein the diameter of the microspheres is between 0.5 and 1 μm.

74. The method of claim 59, wherein the antibodies or antibody fragments are adsorbed noncovalently to the microspheres.

75. The method of claim 59, wherein the antibodies or antibody fragments are covalently bound to the microspheres.

76. The method of claim 59, wherein the antibodies or antibody fragments are indirectly bound to the microspheres.

77. The method of claim 59, wherein the antibodies or antibody fragments are fluorescent.

78. The method of claim 59, wherein the microsphere-solution/suspension mixture is about 250 µl or less.

79. The method of claim 59, wherein the microsphere-solution/suspension mixture is evaluated on a hanging drop slide.

80. The method of claim 59, wherein the microsphere-solution/suspension mixture is evaluated with a microscope.

81. The method of claim 80, wherein the microscope is a fluorescence microscope.

82. The method of claim 59, wherein the microsphere-solution/suspension mixture is evaluated with an instrument that measures light scattering.

83. The method of claim 82, wherein the instrument measures fluorescent light scattering.

84. The method of claim 59, wherein the microsphere-solution/suspension mixture is evaluated visually with the naked eye.

85. The method of claim 59, further comprising applying the microsphere-solution/suspension mixture to a gel surface then subjecting the gel with the microsphere-solution/suspension mixture to centrifugation before the evaluation step, wherein substantial retardation of movement of the microspheres after centrifugation when compared to the microspheres without the solution indicates the presence of agglutination.

86. The method of claim 85, wherein the microspheres are colored.

87. The method of claim 85, wherein the presence of agglutination is evaluated visually with the naked eye.

88. The method of claim 85, wherein the presence of agglutination is evaluated with an instrument.

89. The method of claim 59, wherein the aqueous solution or suspension does not comprise a precultured microorganism.